

WHAT IS CLAIMED:

1. A tooth coating comprising at least one film-forming synthetic polymer at a concentration of at least 10% (w/w), a colorant, and pearlescent particles.
2. A tooth coating according to claim 1, wherein the tooth coating is selected from group consisting of a tooth-coating fluid, a veneer, a natural hard dental surface, an artificial hard dental surface, a crown, a restorative veneer, a partial denture, and a composite.
3. A tooth coating according to claim 1, wherein the synthetic polymer is selected from the group consisting of polyacrylates, polyacrylamides, polyvinylpyrrolidones, polyvinylalcohols, polyethylene glycols, polyethylene oxides, polystyrenes, hydroxypropylmethyl celluloses, hydroxypropyl celluloses, hydroxyethyl celluloses, methyl celluloses, carboxymethyl celluloses, copolymers, block copolymers, graft copolymers, cross-linked polymers and combinations thereof.
4. A tooth coating according to claim 1, wherein the colorant comprises one or more types of white particles which are independently comprised of a material selected from the group consisting of titanium oxide, aluminum oxide, tin oxide, calcium oxide, magnesium oxide, zinc oxide, polyethylene, polypropylene, ethylene/propylene copolymer, polytetrafluoroethylene, and polyhexafluoropropene.
5. A tooth coating according to claim 1, wherein the colorant comprises one or more types of non-white particles which are independently comprised of a material selected from the group consisting of copper oxide, chromium oxide, ferric oxide, ultramarine blue, phthalocyanine green, FD&C Green No. 1 lake, FD&C Blue No. 2 lake, D&C Red No. 30 lake, FD&C Yellow No. 15 lake, FD&C Red No. 3, D&C Red No. 30, Food Red No. 17, disodium

salt of 6-hydroxy-5-((2-methoxy-5-methyl-4-sulphophenyl)azo)-2-naphthalenesulfonic acid, Food Yellow No. 13, sodium salt of a mixture of the mono and disulphonic acids of quinophtalone or 2-(2-quinolyl) indanedione, FD&C Yellow No. No. 5, FD&C Yellow No. 6, FD&C Green No. 3, FD&C Blue No. 1, FD&C Blue No. 2, and combinations thereof.

6. A tooth coating according to claim 1, wherein the pearlescent particles comprise one or more types of particles which are independently comprised of a material selected from the group consisting of bismuth oxychloride, nacre, mollusk shell, fish scale, pearl, silicates selected from the group consisting of mica, opal and silica, and combinations thereof.

7. A tooth coating according to claim 6, wherein the pearlescent particles further comprise a metal oxide coating wherein the metal oxide is selected from the group consisting of titanium oxide, iron oxide, aluminum oxide, tin oxide, copper oxide, calcium oxide, magnesium oxide, barium oxide, chromium oxide and combinations thereof.

8. A tooth coating according to claim 7, wherein the pearlescent particles further comprise a protective coating.

9. A tooth coating according to claim 7, wherein the pearlescent particles are mica titanium particles.

10. A tooth coating according to claim 9, wherein the colorant is titanium dioxide and the pearlescent particles are mica titanium.

11. A tooth coating according to claim 10, wherein the colorant is titanium dioxide, the pearlescent particles are mica titanium and the synthetic polymer is a polyacrylate.

12. A tooth coating according to claim 11, wherein the titanium oxide particles are at a concentration of at least about 1% (w/w) and the pearlescent particles are at a concentration of at least about 3% (w/w).

13. A tooth coating according to claim 1, further comprising an active ingredient selected from the group consisting of anti-caries agents, anti-sensitivity agents, anti-microbial agents, bleaching agents, and combinations thereof.

14. A tooth coating comprising at least one film-forming resin, a colorant at a concentration of at least about 1% (w/w), and pearlescent particles at a concentration of at least about 3% (w/w).

15. A tooth coating according to claim 14, wherein the tooth coating is selected from group consisting of a tooth-coating fluid, a veneer, a natural hard dental surface, an artificial hard dental surface, a crown, a restorative veneer, a partial denture, and a composite.

16. A tooth coating according to claim 14, wherein the film-forming resin is a synthetic resin, a natural resin or a combination thereof, wherein the synthetic resin is selected from the group consisting of polyacrylates, polyacrylamides, polyvinylpyrrolidones, polyvinylalcohols, polyethylene glycols, polyethylene oxides, polystyrenes, hydroxypropyl methyl celluloses, hydroxypropyl celluloses, hydroxyethyl celluloses, methyl celluloses, carboxymethyl celluloses, copolymers, block copolymers, graft copolymers cross-linked polymers and combinations thereof, and the natural resin is selected from the group consisting of colophoniums, mastics, shellacs, natural celluloses, and combinations thereof.

17. A tooth coating according to claim 14, wherein the colorant comprises one or more types of white particles which are independently comprised of a material selected from the group consisting of titanium oxide, aluminum oxide, tin oxide, calcium oxide, magnesium oxide, zinc oxide, polyethylene, polypropylene, ethylene/propylene copolymer, polytetrafluoroethylene, and polyhexafluoropropene.

18. A tooth coating according to claim 14, wherein the colorant comprises one or more types of non-white particles which are independently comprised of a material selected from the group consisting of copper oxide, chromium oxide, ferric oxide, ultramarine blue, phthalocyanine green, FD&C Green No. 1 lake, FD&C Blue No. 2 lake, D&C Red No. 30 lake, FD&C Yellow No. 15 lake, FD&C Red No. 3, D&C Red No. 30, Food Red No. 17, disodium salt of 6-hydroxy-5-{(2-methoxy-5-methyl-4-sulphophenyl)azo}-2-naphthalenesulfonic acid, Food Yellow No. 13, sodium salt of a mixture of the mono and disulphonic acids of quinophtalone or 2-(2-quinolyl) indanedione, FD&C Yellow No. No. 5, FD&C Yellow No. 6, FD&C Green No. 3, FD&C Blue No. 1, FD&C Blue No. 2, and combinations thereof.

19. A tooth coating according to claim 14, wherein the pearlescent particles comprise one or more types of particles which are independently comprised of a material selected from the group consisting of bismuth oxychloride, nacre, mollusk shell, fish scale, pearl, silicates selected from the group consisting of mica, opal and silica, and combinations thereof.

20. A tooth coating according to claim 19, wherein the pearlescent particles further comprise a metal oxide coating wherein the metal oxide is selected from the group consisting of titanium oxide, iron oxide, aluminum oxide, tin oxide, copper oxide, calcium oxide, magnesium oxide, barium oxide, chromium oxide and combinations thereof.

21. A tooth coating according to claim 20, wherein the pearlescent particles further comprise a protective coating.

22. A tooth coating according to claim 20, wherein the pearlescent particles are mica titanium particles.

23. A tooth coating according to claim 22, wherein the colorant is titanium dioxide and the pearlescent particles are mica titanium.

24. A tooth coating according to claim 21, wherein the colorant is titanium dioxide, the pearlescent particles are mica titanium and the synthetic polymer is a polyacrylate.

25. A tooth coating according to claim 24, wherein the titanium oxide particles are at a concentration of at least about 1% (w/w) and the pearlescent particles are at a concentration of at least about 3% (w/w).

26. A tooth coating according to claim 14, further comprising an active ingredient selected from the group consisting of anti-caries agents, anti-sensitivity agents, anti-microbial agents, bleaching agents, and combinations thereof.

27. A method of coloring a tooth in a mammal, the method comprising applying to the tooth a tooth-coloring amount of a tooth coating comprising at least one film-forming synthetic polymer at a concentration of at least 10% (w/w), a colorant, and pearlescent particles.

28. A method according to claim 27, wherein the tooth coating is selected from group consisting of a tooth-coating fluid, a veneer, a natural hard dental surface, an artificial hard dental surface, a crown, a restorative veneer, a partial denture, and a composite.

29. A method according to claim 27, wherein the colorant comprises one or more types of white particles which are independently comprised of a material selected from the group consisting of titanium oxide, aluminum oxide, tin oxide, calcium oxide, magnesium oxide, zinc oxide, polyethylene, polypropylene, ethylene/propylene copolymer, polytetrafluoroethylene, and polyhexafluoropropene.

30. A method according to claim 27, wherein the colorant comprises one or more types of non-white particles which are independently comprised of a material selected from the group consisting of copper oxide, chromium oxide, ferric oxide, ultramarine blue, phthalocyanine green, FD&C Green No. 1 lake, FD&C Blue No. 2 lake, D&C Red No. 30 lake, FD&C Yellow

No. 15 lake, FD&C Red No. 3, D&C Red No. 30, Food Red No. 17, disodium salt of 6-hydroxy-5- $\{$ (2-methoxy-5-methyl-4-sulphophenyl)azo $\}$ -2-naphthalenesulfonic acid, Food Yellow No. 13, sodium salt of a mixture of the mono and disulphonic acids of quinophtalone or 2-(2-quinolyl) indanedione, FD&C Yellow No. No. 5, FD&C Yellow No. 6, FD&C Green No. 3, FD&C Blue No. 1, FD&C Blue No. 2, and combinations thereof.

31. A method according to claim 27, wherein the pearlescent particles comprise one or more types of particles which are independently comprised of a material selected from the group consisting of bismuth oxychloride, nacre, mollusk shell, fish scale, pearl, silicates selected from the group consisting of mica, opal and silica, and combinations thereof.

32. A method according to claim 27, wherein the pearlescent particles are further comprise a metal oxide coating wherein the metal oxide is selected from the group consisting of titanium oxide, iron oxide, aluminum oxide, tin oxide, copper oxide, calcium oxide, magnesium oxide, barium oxide, chromium oxide and combinations thereof.

33. A method according to claim 32, wherein the pearlescent particles are mica titanium particles.

34. A method according to claim 33, wherein the colorant is titanium dioxide and the pearlescent particles are mica titanium.

35. A method according to claim 34, wherein the colorant is titanium dioxide at a concentration of at least about 1% (w/w), the pearlescent particles are mica titanium at a concentration of at least about 3% (w/w) and the synthetic polymer is a polyacrylate.

36. A method according to claim 27, wherein the tooth coating further comprises an active ingredient selected from the group consisting of anti-caries agents, anti-sensitivity agents, anti-microbial agents, bleaching agents, and combinations thereof.

37. A method of coloring a tooth in a mammal, the method comprising applying to the tooth a tooth-coloring amount of a tooth coating comprising at least one film-forming resin, a colorant at a concentration of at least about 1% (w/w), and pearlescent particles at a concentration of at least about 3% (w/w).

38. A method according to claim 37, wherein the tooth coating is selected from group consisting of a tooth-coating fluid, a veneer, a natural hard dental surface, an artificial hard dental surface, a crown, a restorative veneer, a partial denture, and a composite.

39. A method according to claim 37, wherein the film-forming resin is a synthetic resin, a natural resin or a combination thereof, wherein the synthetic resin is selected from the group consisting of polyacrylates, polyacrylamides, polyvinylpyrrolidones, polyvinylalcohols, polyethylene glycols, polyethylene oxides, polystyrenes, hydroxypropyl methyl celluloses, hydroxypropyl celluloses, hydroxyethyl celluloses, methyl celluloses, carboxymethyl celluloses, copolymers, block copolymers, graft copolymers cross-linked polymers and combinations thereof, and the natural resin is selected from the group consisting of colophoniums, mastics, shellacs, natural celluloses, and combinations thereof.

40 . A method according to claim 37, wherein the colorant comprises one or more types of white particles which are independently comprised of a material selected from the group consisting of titanium oxide, aluminum oxide, tin oxide, calcium oxide, magnesium oxide, zinc oxide, polyethylene, polypropylene, ethylene/propylene copolymer, polytetrafluoroethylene, and polyhexafluoropropene.

41. A method according to claim 37, wherein the colorant comprises one or more types of non-white particles which are independently comprised of a material selected from the group consisting of copper oxide, chromium oxide, ferric oxide, ultramarine blue, phthalocyanine green, FD&C Green No. 1 lake, FD&C Blue No. 2 lake, D&C Red No. 30 lake, FD&C Yellow No. 15 lake, FD&C Red No. 3, D&C Red No. 30, Food Red No. 17, disodium salt of 6-hydroxy-5-{{(2-methoxy-5-methyl-4-sulphophenyl)azo}-2-naphthalenesulfonic acid, Food Yellow No. 13, sodium salt of a mixture of the mono and disulphonic acids of quinophtalone or 2-(2-quinolyl) indanedione, FD&C Yellow No. No. 5, FD&C Yellow No. 6, FD&C Green No. 3, FD&C Blue No. 1, FD&C Blue No. 2, and combinations thereof.

42. A method according to claim 37, wherein the pearlescent particles comprise one or more types of particles which are independently comprised of a material selected from the group consisting of bismuth oxychloride, nacre, mollusk shell, fish scale, pearl, silicates selected from the group consisting of mica, opal and silica, and combinations thereof.

43. A method according to claim 37, wherein the pearlescent particles further comprise a metal oxide coating wherein the metal oxide is selected from the group consisting of titanium oxide, iron oxide, aluminum oxide, tin oxide, copper oxide, calcium oxide, magnesium oxide, barium oxide, chromium oxide and combinations thereof.

44. A method according to claim 43, wherein the pearlescent particles are mica titanium particles.

45. A method according to claim 44, wherein the colorant is titanium dioxide and the pearlescent particles are mica titanium.



46. A method according to claim 45, wherein the colorant is titanium dioxide at a concentration of at least about 1% (w/w), the pearlescent particles are mica titanium at a concentration of at least about 3% (w/w) and the synthetic polymer is a polyacrylate.